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A schematic diagram of a gas furnace system. The main furnace chamber (1) contains a burner (2) and two rows of gas burners (3 and 4). Arrows indicate the flow of gas from the burner (2) through the gas burners (3 and 4) and out through a flue (8). A preheating system (10) is connected to the flue (8) via a gas line (11). The preheating system includes a gas burner (12) and a heat exchanger (13). Arrows show the flow of gas from the burner (12) through the heat exchanger (13) and back into the main furnace chamber (1) through a gas line (14). The heat exchanger (13) is connected to the main furnace chamber (1) via a gas line (15). The main furnace chamber (1) is insulated by a brick wall (9). The burner (2) is connected to a gas supply (6) and a control valve (7). The burner (12) is connected to a gas supply (16) and a control valve (17).

(57) **Abstract:** Use of a Fischer-Tropsch derived fuel in condensing boiler. The fuel comprises a Fischer-Tropsch product which boils for more than 90 wt% between 160 and 400 °C and contains more than 80 wt% of iso and normal paraffins, less than 1 wt% aromatics, less than 5 ppm sulphur and less than 1 ppm nitrogen and wherein the density of the Fischer-Tropsch product is between 0.65 and 0.8 g/cm³ at 15 °C.

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